

# Instructions

for the



## INFRARED MOTION DETECTOR

Model RTA-1-1

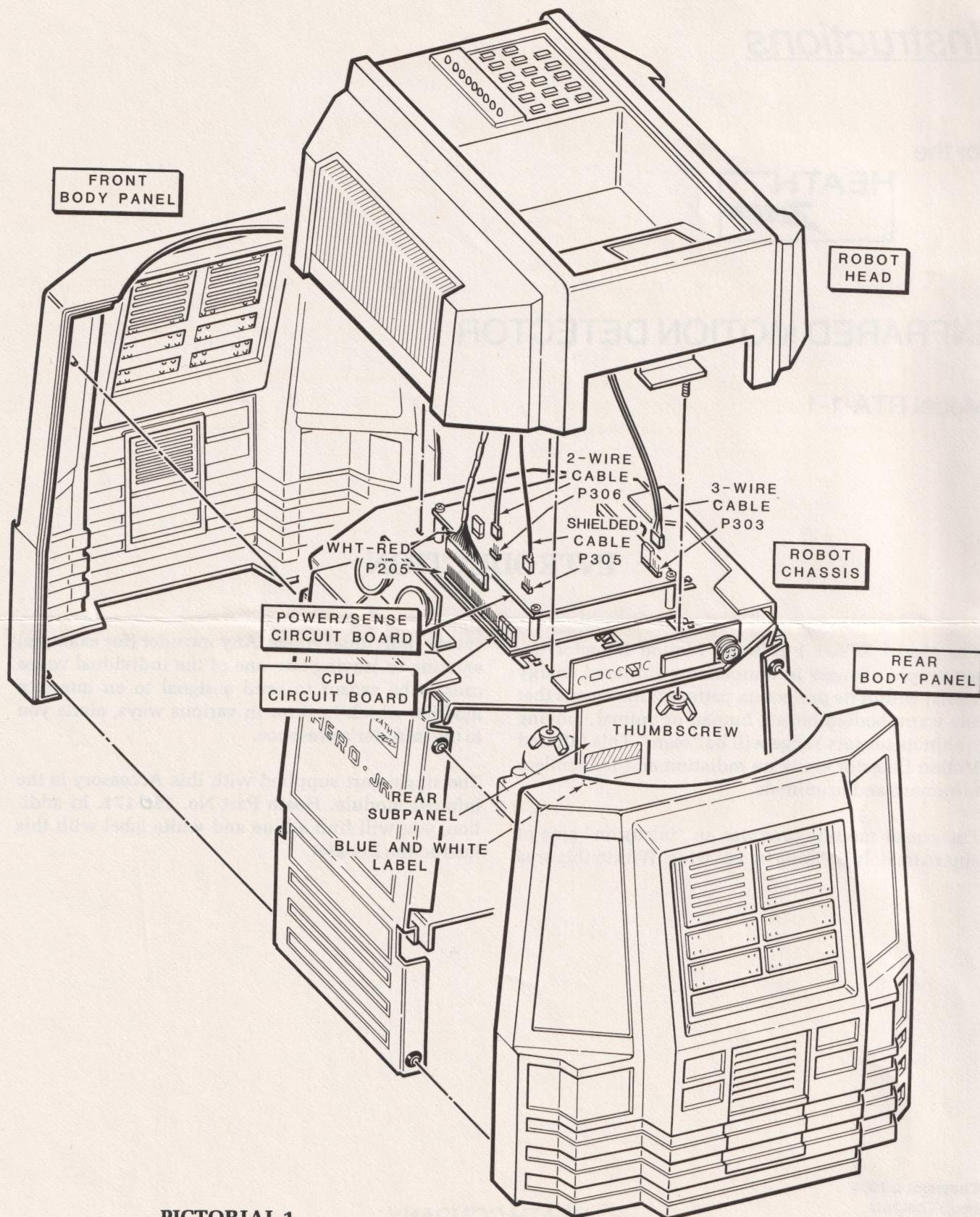
### INTRODUCTION

The Model RTA-1-1 Infrared Motion Detector detects rapid changes in temperature (infrared energy levels) within its protection pattern. This means that any warm-bodied object, human or animal, moving within its sensory range will be "seen." This Infrared Motion Detector emits no radiation and is harmless to humans and to animals.

The sensor module provides an "intrusion" area of approximately 35' long by 20' wide. Within this area

are six individual zones. Any intruder (for example) entering or leaving any one of the individual zones causes the sensor to send a signal to an interface module, which in turn, in various ways, alerts you to the intruder's presence.

The single part supplied with this Accessory is the Infrared module, Heath Part No. 150-171. In addition, you will find a blue and white label with this Instruction Booklet.



PICTORIAL 1

## ROBOT DISASSEMBLY

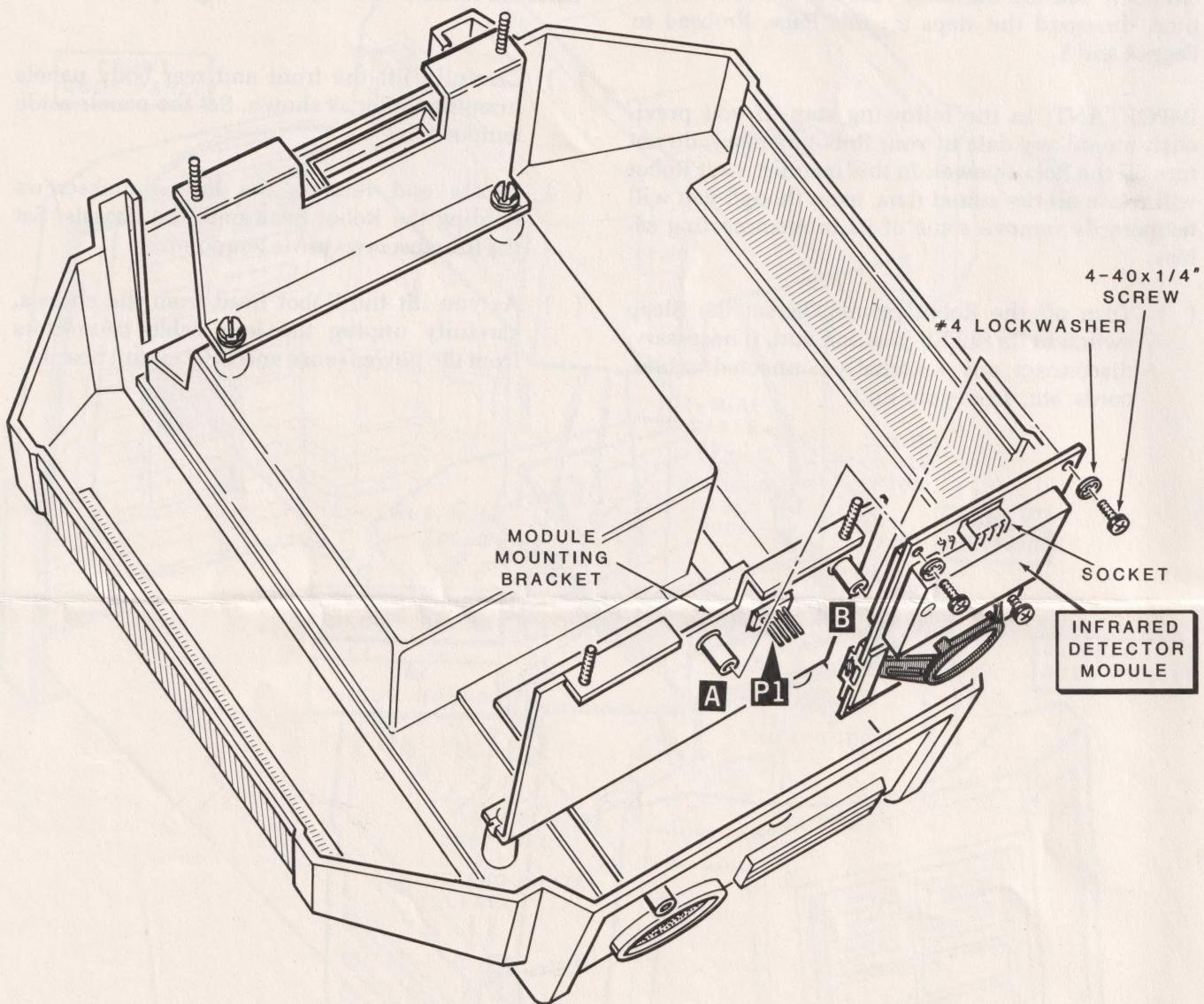
NOTE: If you are building your RT-1 Robot at this time, disregard the steps on this Page. Proceed to Pages 4 and 5.

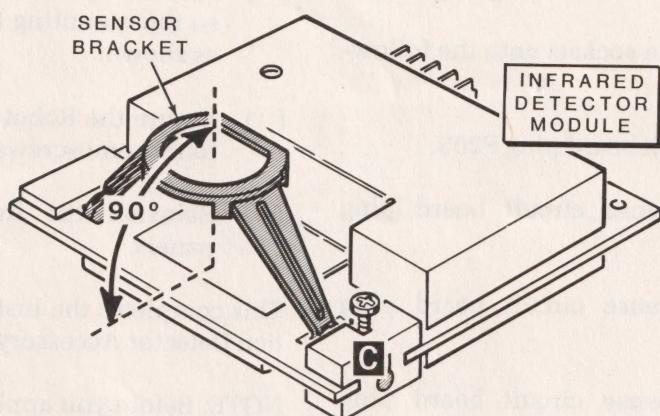
IMPORTANT: In the following step, if you previously stored any data in your Robot memory, do **not** turn off the Robot power. In this manner, your Robot will retain all the stored data, even though you will temporarily remove some of its interconnecting cables.

( ) Turn off the Robot power OR set the Sleep switch to its SLEEP position and, if necessary, disconnect any externally-connected cables, cords, etc., from your unit.

Refer to Pictorial 1 for the following steps.

- ( ) Carefully lift the front and rear body panels from the Robot as shown. Set the panels aside temporarily.
- ( ) Locate and remove the four thumbscrews holding the Robot head onto the chassis. Set the thumbscrews aside temporarily.
- ( ) As you lift the Robot head from the chassis, carefully unplug the four cable connectors from the power/sense and CPU circuit boards.

**PICTORIAL 2**



Detail 2A

Refer to Pictorial 2 for the following steps.

- (✓) Set the head top-side-down on your work area as shown.
- (✓) Locate and remove the two screws and the two lockwashers from bracket spacers A and B.

Refer to Detail 2A for the next two steps.

- (✓) Position the infrared detector module on your work area as shown.
- (✓) Position the sensor bracket so it stands straight up from the surface of the module; then carefully tighten screw C until it is just snug.

## MODULE INSTALLATION

Refer to Pictorial 2 for the following steps.

- (✓) Mount the socket on the infrared module onto robot chassis plug P1 as shown.
- (✓) Secure the two upper module corners to chassis spacers A and B with the two #4 lockwashers and the two 4-40 × 1/4" screws previously removed.
- ( ) Remove the paper backing from the blue and white label and press the label onto the rear subpanel as shown in Pictorial 1. NOTE: Always refer to the Model and Series numbers on the blue and white label in any correspondence you have with the Heath Company about your kit.

### NOTES:

1. If you ordered any other option to install in your RT-1 Robot, you should refer to any applicable installation instructions and complete those steps before you continue with the reassembly of the Robot on the following pages.
2. If you are still assembling your Robot, return to that Assembly Manual, Page 71, and proceed with the Manual's instructions.

Refer back to Pictorial 1 for the following steps.

Carefully reinstall the cable sockets onto the following circuit board plugs:

- ( ) S205 onto CPU circuit board plug P205.
- ( ) S305 onto power/sense circuit board plug P305.
- ( ) S306 onto power/sense circuit board plug P306.
- ( ) S303 onto power/sense circuit board plug P303.

- ( ) Position the Robot head down onto the chassis so the mounting bolts enter the chassis holes as shown.
- ( ) Secure the Robot head to the chassis with the four thumbscrews previously removed.
- ( ) Reinstall the front and back Robot body panels.

This completes the installation of your Infrared Motion Detector Accessory.

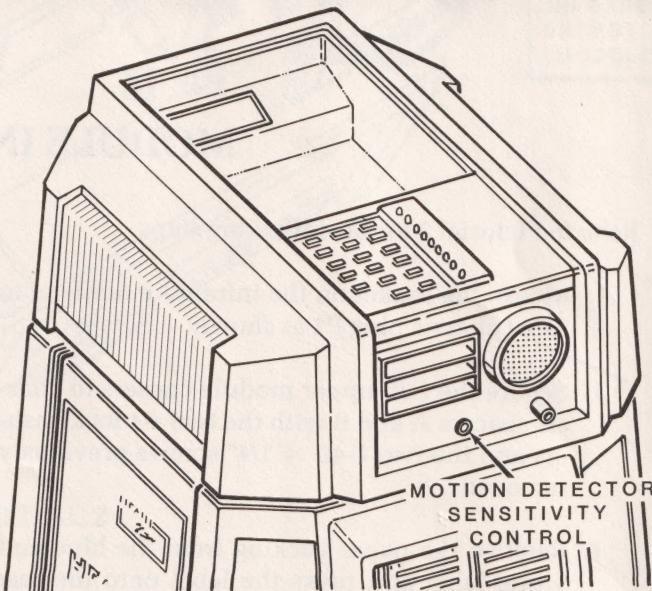
NOTE: Before you apply power to your Robot again, be sure to place it on the floor. During the internal initial tests for proper operation, it is possible that some movement will occur.

## INITIAL TESTS

NOTE: The initial test for the Infrared Motion Detector, Model RTA-1-1, is included in a series of other internal tests. When you turn on the power again, you will hear a series of memory checks.

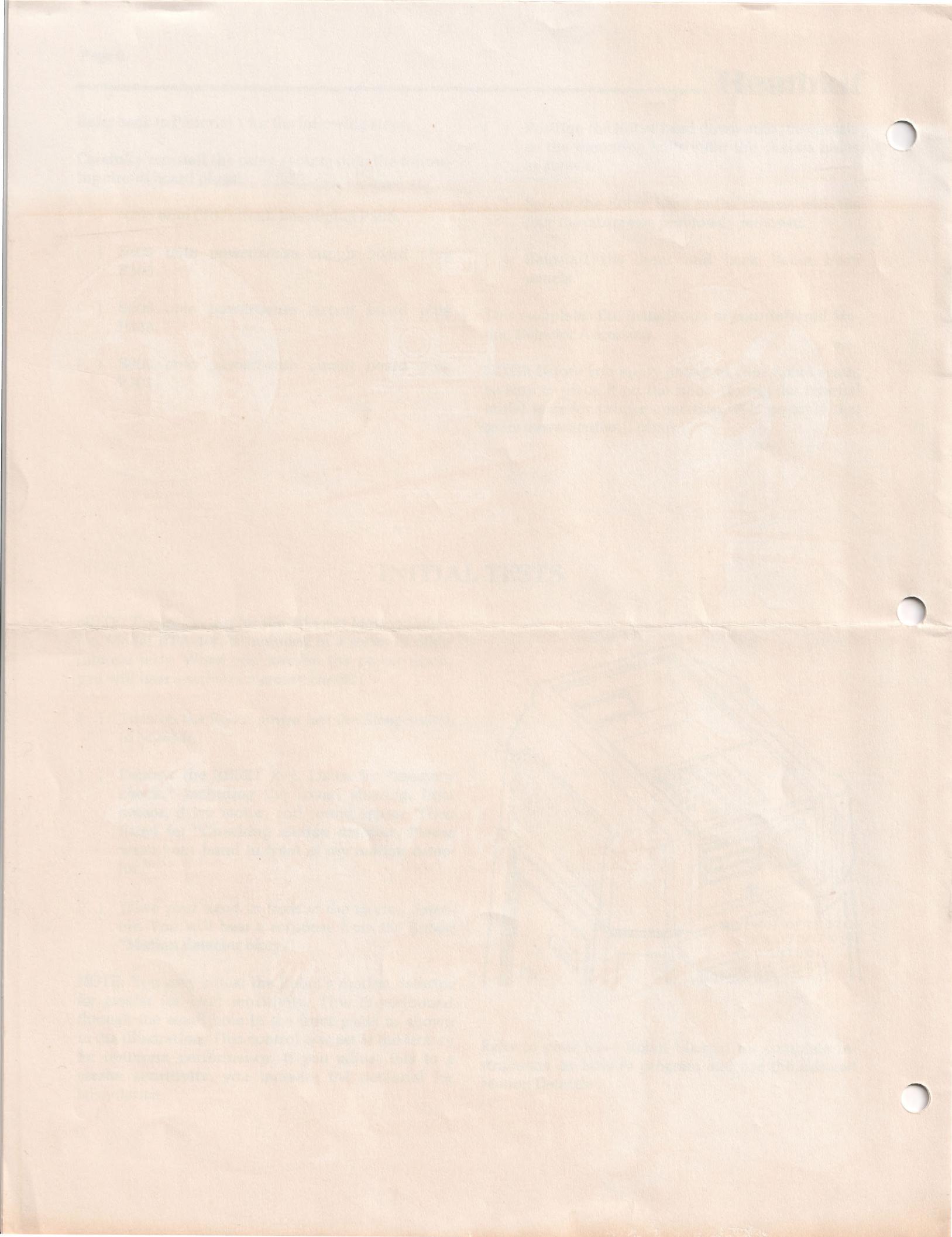
- ( ) Turn on the Robot power (set the Sleep switch to NORM).
- ( ) Depress the RESET key. Listen for **“memory check,”** including the sonar, steering, light sensor, drive motor, and sound sensor. Then listen for **“Checking motion detector. Please wave your hand in front of my motion detector.”**
- ( ) Wave your hand in front of the motion detector. You will hear a response from the Robot: **“Motion detector okay.”**

NOTE: You may adjust the Robot's motion detector for greater (or less) sensitivity. This is performed through the small hole in the front panel as shown in the illustration. This control was set at the factory for optimum performance. If you adjust this to a greater sensitivity, you increase the potential for false alarms.



Refer to your RT-1 Robot Manual for complete instructions on how to program and use the Infrared Motion Detector.







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## IMPORTANT NOTICE

Please make the following changes in your Manual before you start to assemble your kit.

Page 1 — Right column. Change the second paragraph, second line to read:

“... Infrared module, Heath Part No. 150-171.

— Following the Introduction information, add:

“Two ‘Security’ labels have also been provided with your kit that you can post in prominent places on doors or windows to warn potential intruders that your property is guarded.”

Thank you,

HEATH COMPANY

**Heathkit® P-0**

RTA-1-1/597-3619-1  
591-4555